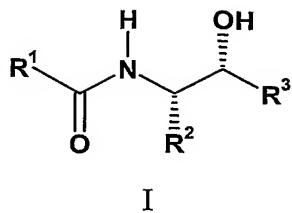


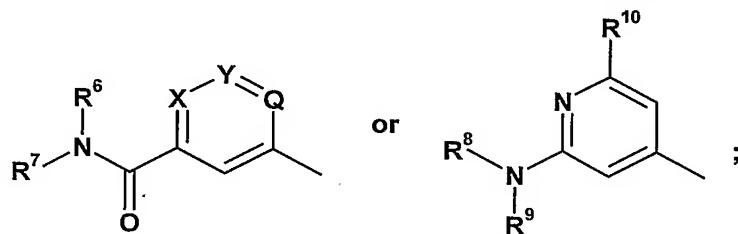
We Claim:

1. A compound of Formula I:



5 where:

R^1 is (C_3 - C_7 cycloalkyl) $_{0-1}$ (C_1 - C_6 alkyl), (C_3 - C_7 cycloalkyl) $_{0-1}$ (C_2 - C_6 alkenyl), (C_3 - C_7 cycloalkyl) $_{0-1}$ (C_2 - C_6 alkynyl) or C_3 - C_7 cycloalkyl, each optionally substituted with up to three groups independently selected from halo, hydroxy, thiol, cyano, trifluoromethyl, trifluoromethoxy, C_1 - C_7 alkoxy, C_3 - C_7 cycloalkoxy, oxo, and NR^4R^5 , biphenyl optionally

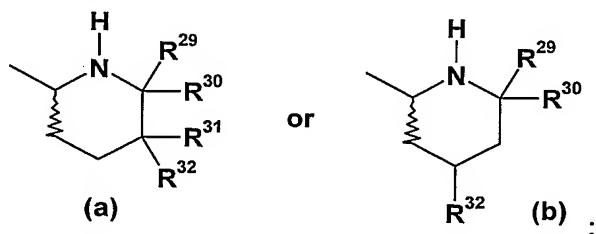


10 substituted with halo, hydrogen,

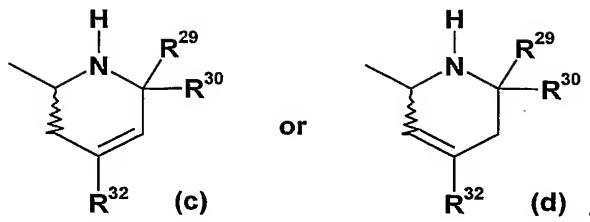
R^2 is C_1 - C_3 alkyl, benzyl optionally monosubstituted in the phenyl ring with a substituent selected from the group consisting of halo, C_1 - C_6 alkoxy optionally substituted in the alkyl chain with C_3 - C_7 cycloalkyl, and C_1 - C_6 alkylthio optionally substituted in the alkyl chain with C_3 - C_7 cycloalkyl, or benzyl optionally disubstituted in the phenyl ring with a first substituent independently selected from halo and a second substituent independently selected from halo, C_1 - C_6 alkoxy optionally substituted in the alkyl chain with C_3 - C_7 cycloalkyl, and C_1 - C_6 alkylthio optionally substituted in the alkyl chain with C_3 - C_7 cycloalkyl;

15 R^3 is:

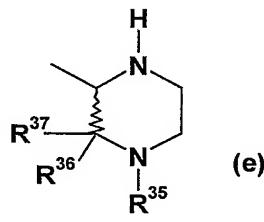
20 i) a piperidin-2-yl moiety of formula:



ii) a tetrahydropyridin-2-yl moiety of formula:



iii) a piperazin-2-yl moiety of formula:



- iv) homopiperidin-2-yl;
- 5 v) 1,2,3,4-tetrahydroisoquinolin-3-yl optionally substituted with one or two substituents selected from halo, C₁-C₆ alkyl, and C₁-C₆ alkoxy;
- vi) 2-azabicyclo[2.2.2]oct-(5Z)ene-3-yl;
- vii) 2-azabicyclo[2.2.1]hept-3-yl optionally substituted with C₁-C₁₀ alkyl optionally substituted with C₁-C₄ alkoxy; or
- 10 viii) 2-azabicyclo[2.2.2]oct-3-yl optionally substituted with oxo, or optionally substituted with one or two substituents independently selected from hydroxy, fluoro, and C₁-C₆ alkyl;

X is CH, N, or N⁺-O⁻;

Y is CR¹¹, N, or N⁺-O⁻;

15 Q is CR¹², N, or N⁺-O⁻;

R⁴ is hydrogen, C₁-C₆ alkyl optionally substituted up to three times with fluoro, or phenyl;

R⁵ is hydrogen, C₁-C₆ alkyl optionally substituted up to three times with fluoro, phenyl, -C(O)(C₁-C₆ alkyl optionally substituted up to three times with fluoro), or

20 -SO₂(C₁-C₆ alkyl optionally substituted up to three times with fluoro);

R⁶ and R⁷ are independently selected from the group consisting of methyl, ethyl, and propyl;

R⁸ is hydrogen or C₁-C₆ alkyl;

R⁹ is C₃-C₅ cycloalkyl, sec-butyl, or -CH₂R¹³;

R¹⁰ is -CF₂R¹⁴, -OR¹⁵, -CH₂C(O)CH₃, -S(O)₁₋₂R¹⁶, -NR¹⁷SO₂R¹⁸, (C₁-C₃ alkoxy)-carbonyl, phenyl optionally substituted with halo, 1,3-dioxolan-2-yl, 1,3-dioxan-2-yl, 1,1-dioxo-2,3,4,5-tetrahydroisothiazol-2-yl, or tetrazol-5-yl optionally substituted with C₁-C₃ alkyl;

5 R¹¹ is hydrogen, chloro, isobutyl, CH₂R¹⁹; CF₂R²⁰, 1,1,1-trifluoro-2-hydroxyeth-2-yl, C₂-C₄ alkenyl optionally substituted with one or two fluorine atoms, OR²¹, C(O)R²², N(methyl)(methylsulfonyl), N(methyl)(acetyl), pyrrolidin-2-on-1-yl, methylsulfonyl, N,N-dimethylaminosulfonyl, phenyl optionally substituted with one or two substituents selected from the group consisting of hydroxymethyl, methoxy, fluoro, and

10 methylsulfonyl, 1,3-dioxolan-2-yl, 1,3-dithiolan-2-yl, 1,3-oxathiolan-2-yl, 1,3-dioxan-2-yl, 1,3-dithian-2-yl, pyridinyl, thiazolyl, oxazolyl, or 1,2,4-oxadiazolyl optionally substituted with methyl;

R¹² is hydrogen or fluoro;

R¹³ is ethynyl or cyclopropyl;

15 R¹⁴ is hydrogen or methyl;

R¹⁵ is difluoromethyl or methanesulfonyl;

R¹⁶ is C₁-C₄ alkyl, C₃-C₆ cycloalkyl, phenyl, or -NR²⁵R²⁶;

R¹⁷ is hydrogen, C₁-C₃ alkyl optionally substituted with up to 3 fluorine atoms, or C₃-C₆ cycloalkyl;

20 R¹⁸ is C₁-C₃ alkyl or C₃-C₆ cycloalkyl;

R¹⁹ is fluoro, hydroxy, or C₁-C₃ alkoxy;

R²⁰ is hydrogen, phenyl, or furyl;

R²¹ is C₁-C₃ alkyl optionally substituted with one or two fluorine atoms;

R²² is C₁-C₃ alkyl, C₃-C₅ cycloalkyl, C₂-C₃ alkenyl, C₁-C₃ alkoxy, NR²³R²⁴,

25 pyrrolidin-1-yl optionally substituted with methyl or one or two fluorine atoms, piperidin-1-yl, phenyl, pyridinyl, or furyl;

R²³ is hydrogen or methyl;

R²⁴ is methyl, ethyl, or propyl;

R²⁵ is hydrogen or methyl;

30 R²⁶ is methyl; or

R²⁵ and R²⁶ taken together with the nitrogen atom to which they are attached form a pyrrolidine or piperidine ring;

R²⁹ is hydrogen or C₁-C₆ alkyl;
R³⁰ is hydrogen or C₁-C₆ alkyl;
R²⁹ and R³⁰ taken together with the carbon to which they are attached form a C₃-C₆ cycloalkyl ring;

5 R³¹ is hydrogen, C₁-C₆ alkyl, C₃-C₆ cycloalkyl, or phenyl optionally monosubstituted with C₁-C₆ alkyl;

R³² is hydrogen, R³³, or -(CH₂)₀₋₂-OR³³;
R³³ is C₁-C₁₀ alkyl optionally substituted with 1-6 fluorine atoms, C₂-C₆ alkenyl, C₂-C₆ alkynyl, or -(CH₂)₀₋₃-R³⁴;

10 R³⁴ is C₃-C₇ cycloalkyl or phenyl each optionally substituted with one or two substitutents independently selected from the group consisting of halo, C₁-C₆ alkyl, C₁-C₆ alkoxy, hydroxy, trifluoromethyl, and trifluoromethoxy, thienyl optionally substituted with halo, benzothienyl optionally substituted with halo, thiazolyl optionally substituted with C₁-C₄ alkyl, or adamantyl;

15 R³⁵ is -(CH₂)₀₋₆-R³⁴, -C(O)-(CH₂)₀₋₆-R³⁴, -C(O)-(C₁-C₁₀ alkyl), -C(O)-(C₁-C₄ alkoxy optionally substituted with phenyl), C₁-C₁₀ alkyl optionally substituted with 1-6 fluorine atoms, C₂-C₁₀ alkenyl, or C₂-C₁₀ alkynyl;

20 R³⁶ and R³⁷ are both hydrogen or, taken together with the carbon atom to which they are attached form a carbonyl group; or a pharmaceutically acceptable salt thereof; provided that: a) no more than one of X, Y, and Q may be N or N⁺-O⁻; and b) when X is CH, Y is CR¹¹, and Q is CR¹², then one of R¹¹ and R¹² is other than hydrogen.

2. The use of a compound of Claim 1 for the manufacture of a medicament for the treatment of Alzheimer's disease.

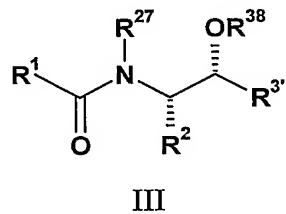
25 3. The use of a compound of Claim 1 for the manufacture of a medicament for the prevention of the progression of mild cognitive impairment to Alzheimer's disease.

30 4. The use of a compound of Claim 1 for the manufacture of a medicament for treating a disease or condition capable of being improved or prevented by inhibition of BACE..

5. A pharmaceutical formulation adapted for the treatment of conditions resulting from excessive levels of A- β peptide comprising a compound of Claim 1 in combination with one or more pharmaceutically acceptable excipients, carriers, or diluents.

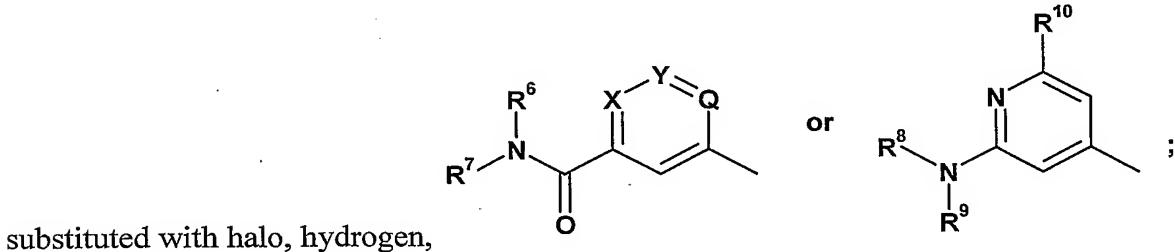
5 6. A pharmaceutical formulation comprising a compound of Claim 1, in combination with a pharmaceutically acceptable carrier, diluent, or excipient.

7. A compound of Formula III:



where:

R¹ is (C₃-C₇ cycloalkyl)₀₋₁(C₁-C₆ alkyl), (C₃-C₇ cycloalkyl)₀₋₁(C₂-C₆ alkenyl), (C₃-C₇ cycloalkyl)₀₋₁(C₂-C₆ alkynyl) or C₃-C₇ cycloalkyl, each optionally substituted with up to three groups independently selected from halo, hydroxy, thiol, cyano, trifluoromethyl, trifluoromethoxy, C₁-C₇ alkoxy, C₃-C₇ cycloalkoxy, oxo, and NR⁴R⁵, biphenyl optionally

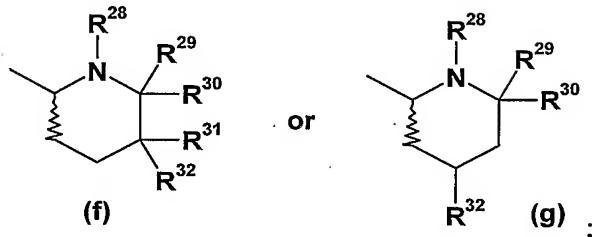


20 R² is C₁-C₃ alkyl, benzyl optionally monosubstituted in the phenyl ring with a substituent selected from the group consisting of halo, C₁-C₆ alkoxy optionally substituted in the alkyl chain with C₃-C₇ cycloalkyl, and C₁-C₆ alkylthio optionally substituted in the alkyl chain with C₃-C₇ cycloalkyl, or benzyl optionally disubstituted in the phenyl ring with a first substituent independently selected from halo and a second substituent independently selected from halo, C₁-C₆ alkoxy optionally substituted in the alkyl chain with C₃-C₇ cycloalkyl, and C₁-C₆ alkylthio optionally substituted in the alkyl chain with

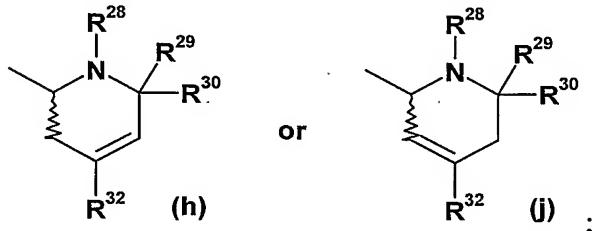
25 C₃-C₇ cycloalkyl;

R^3 is:

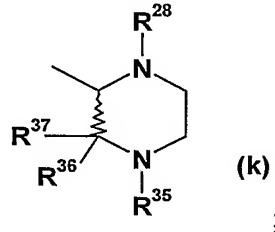
- ix) a piperidin-2-yl moiety of formula:



- x) a tetrahydropyridin-2-yl moiety of formula:



- xi) a piperazin-2-yl moiety of formula:



- xii) homopiperidin-2-yl substituted in the 1-position with variable R²⁸;
 - xiii) 1,2,3,4-tetrahydroisoquinolin-3-yl substituted in the 1-position with variable R²⁸ and optionally further substituted with one or two substituents selected from halo, C₁-C₆ alkyl, and C₁-C₆ alkoxy;
 - xiv) 2-azabicyclo[2.2.2]oct-(5Z)ene-3-yl substituted in the 2-position with variable R²⁸;
 - xv) 2-azabicyclo[2.2.1]hept-3-yl substituted in the 2-position with variable R²⁸ and optionally further substituted with C₁-C₁₀ alkyl optionally substituted with C₁-C₄ alkoxy; or
 - xvi) 2-azabicyclo[2.2.2]oct-3-yl substituted in the 2-position with variable R²⁸ and optionally further substituted with oxo, or optionally further substituted with one or two substituents independently selected from hydroxy, fluoro, and C₁-C₆ alkyl;

X is CH, N, or N⁺-O⁻;

Y is CR¹¹, N, or N⁺-O⁻;

Q is CR¹², N, or N⁺-O⁻;

R⁴ is hydrogen, C₁-C₆ alkyl optionally substituted up to three times with fluoro, or
5 phenyl;

R⁵ is hydrogen, C₁-C₆ alkyl optionally substituted up to three times with fluoro,
phenyl, -C(O)(C₁-C₆ alkyl optionally substituted up to three times with fluoro), or
-SO₂(C₁-C₆ alkyl optionally substituted up to three times with fluoro);

10 R⁶ and R⁷ are independently selected from the group consisting of methyl, ethyl,
and propyl;

R⁸ is hydrogen or C₁-C₆ alkyl;

R⁹ is C₃-C₅ cycloalkyl, sec-butyl, or -CH₂R¹³;

15 R¹⁰ is -CF₂R¹⁴, -OR¹⁵, -CH₂C(O)CH₃, -S(O)₁₋₂R¹⁶, -NR¹⁷SO₂R¹⁸, (C₁-C₃ alkoxy)-
carbonyl, 1,3-dioxolan-2-yl, 1,3-dioxan-2-yl, 1,1-dioxo-2,3,4,5-tetrahydroisothiazol-2-yl,
or tetrazol-5-yl optionally substituted with C₁-C₃ alkyl;

20 R¹¹ is hydrogen, chloro, isobutyl, CH₂R¹⁹; CF₂R²⁰, 1,1,1-trifluoro-2-hydroxyeth-2-
yl, C₂-C₄ alkenyl optionally substituted with one or two fluorine atoms, OR²¹, C(O)R²²,
N(methyl)(methylsulfonyl), N(methyl)(acetyl), pyrrolidin-2-on-1-yl, methylsulfonyl,
N,N-dimethylaminosulfonyl, phenyl optionally substituted with one or two substituents
selected from the group consisting of hydroxymethyl, methoxy, fluoro, and
25 methylsulfonyl, 1,3-dioxolan-2-yl, 1,3-dithiolan-2-yl, 1,3-oxathiolan-2-yl, 1,3-dioxan-2-
yl, 1,3-dithian-2-yl, pyridinyl, thiazolyl, oxazolyl, or 1,2,4-oxadiazolyl optionally
substituted with methyl;

R¹² is hydrogen or fluoro;

25 R¹³ is ethynyl or cyclopropyl;

R¹⁴ is hydrogen or methyl;

R¹⁵ is difluoromethyl or methanesulfonyl;

R¹⁶ is C₁-C₄ alkyl, C₃-C₆ cycloalkyl, phenyl, or -NR²⁵R²⁶;

30 R¹⁷ is hydrogen, C₁-C₃ alkyl optionally substituted with up to 3 fluorine atoms, or
C₃-C₆ cycloalkyl;

R¹⁸ is C₁-C₃ alkyl or C₃-C₆ cycloalkyl;

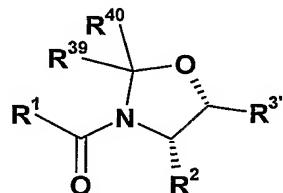
R¹⁹ is fluoro, hydroxy, or C₁-C₃ alkoxy;

- R²⁰ is hydrogen, phenyl, or furyl;
- R²¹ is C₁-C₃ alkyl optionally substituted with one or two fluorine atoms;
- R²² is C₁-C₃ alkyl, C₃-C₅ cycloalkyl, C₂-C₃ alkenyl, C₁-C₃ alkoxy, NR²³R²⁴, pyrrolidin-1-yl optionally substituted with methyl or one or two fluorine atoms, piperidin-1-yl, phenyl, pyridinyl, or furyl;
- 5 R²³ is hydrogen or methyl;
- R²⁴ is methyl, ethyl, or propyl;
- R²⁵ is hydrogen or methyl;
- R²⁶ is methyl; or
- 10 R²⁵ and R²⁶ taken together with the nitrogen atom to which they are attached form a pyrrolidine or piperidine ring;
- R²⁷ is hydrogen or a nitrogen protecting group;
- R²⁸ is hydrogen or a nitrogen protecting group;
- R²⁹ is hydrogen or C₁-C₆ alkyl;
- 15 R³⁰ is hydrogen or C₁-C₆ alkyl;
- R²⁹ and R³⁰ taken together with the nitrogen to which they are attached form a C₃-C₆ cycloalkyl ring;
- R³¹ is hydrogen, C₁-C₆ alkyl, C₃-C₆ cycloalkyl, or phenyl optionally monosubstituted with C₁-C₆ alkyl;
- 20 R³² is hydrogen, R³³, or -(CH₂)₀₋₂-OR³³;
- R³³ is C₁-C₁₀ alkyl optionally substituted with 1-6 fluorine atoms, C₂-C₆ alkenyl, C₂-C₆ alkynyl, or -(CH₂)₀₋₃-R³⁴;
- 25 R³⁴ is C₃-C₇ cycloalkyl or phenyl each optionally substituted with one or two substitutents independently selected from the group consisting of halo, C₁-C₆ alkyl, C₁-C₆ alkoxy, hydroxy, trifluoromethyl, and trifluoromethoxy, thienyl optionally substituted with halo, benzothienyl optionally substituted with halo, thiazolyl optionally substituted with C₁-C₄ alkyl, or adamantyl;
- 30 R³⁵ is -(CH₂)₀₋₆-R³⁴, -C(O)-(CH₂)₀₋₆-R³⁴, -C(O)-(C₁-C₁₀ alkyl), -C(O)-(C₁-C₄ alkoxy optionally substituted with phenyl), C₁-C₁₀ alkyl optionally substituted with 1-6 fluorine atoms, C₂-C₁₀ alkenyl, or C₂-C₁₀ alkynyl;
- R³⁶ and R³⁷ are both hydrogen or, taken together with the carbon atom to which they are attached form a carbonyl group;

R^{38} is hydrogen or an oxygen protecting group; or an acid addition salt thereof provided that: a) no more than one of X, Y, and Q may be N or N^+-O^- ; b) when X is CH, Y is CR^{11} , and Q is CR^{12} , then one of R^{11} and R^{12} is other than hydrogen; and c) at least one of R^{27} , R^{28} , and R^{38} is other than hydrogen.

5

8. A compound of Formula IV:

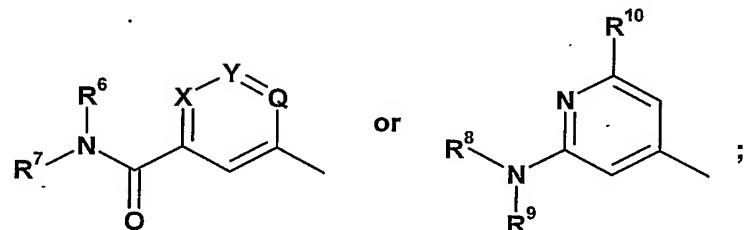


IV

10 where:

R^1 is $(C_3-C_7 \text{ cycloalkyl})_{0-1}(C_1-C_6 \text{ alkyl})$, $(C_3-C_7 \text{ cycloalkyl})_{0-1}(C_2-C_6 \text{ alkenyl})$, $(C_3-C_7 \text{ cycloalkyl})_{0-1}(C_2-C_6 \text{ alkynyl})$ or $C_3-C_7 \text{ cycloalkyl}$, each optionally substituted with up to three groups independently selected from halo, hydroxy, thiol, cyano, trifluoromethyl, trifluoromethoxy, C_1-C_7 alkoxy, C_3-C_7 cycloalkoxy, oxo, and NR^4R^5 , biphenyl optionally

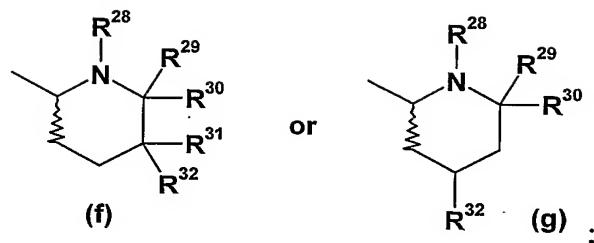
15 substituted with halo, hydrogen,



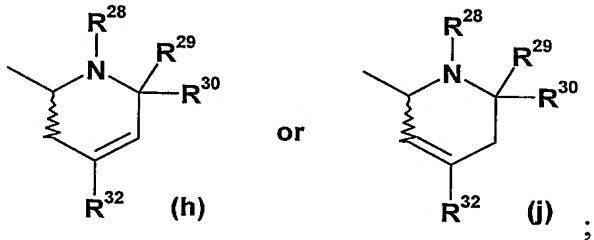
20 R^2 is C_1-C_3 alkyl, benzyl optionally monosubstituted in the phenyl ring with a substituent selected from the group consisting of halo, C_1-C_6 alkoxy optionally substituted in the alkyl chain with C_3-C_7 cycloalkyl, and C_1-C_6 alkylthio optionally substituted in the alkyl chain with C_3-C_7 cycloalkyl, or benzyl optionally disubstituted in the phenyl ring with a first substituent independently selected from halo and a second substituent independently selected from halo, C_1-C_6 alkoxy optionally substituted in the alkyl chain with C_3-C_7 cycloalkyl, and C_1-C_6 alkylthio optionally substituted in the alkyl chain with C_3-C_7 cycloalkyl;

25 $R^{3'}$ is:

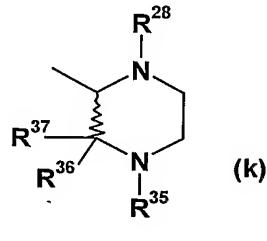
ix) a piperidin-2-yl moiety of formula:



x) a tetrahydropyridin-2-yl moiety of formula:



xii) a piperazin-2-yl moiety of formula:



- xii) homopiperidin-2-yl substituted in the 1-position with variable R²⁸;
- xiii) 1,2,3,4-tetrahydroisoquinolin-3-yl substituted in the 1-position with variable R²⁸ and optionally further substituted with one or two substituents selected from halo, C₁-C₆ alkyl, and C₁-C₆ alkoxy;
- xiv) 2-azabicyclo[2.2.2]oct-(5Z)ene-3-yl substituted in the 2-position with variable R²⁸;
- xv) 2-azabicyclo[2.2.1]hept-3-yl substituted in the 2-position with variable R²⁸ and optionally further substituted with C₁-C₁₀ alkyl optionally substituted with C₁-C₄ alkoxy; or
- xvi) 2-azabicyclo[2.2.2]oct-3-yl substituted in the 2-position with variable R²⁸ and optionally further substituted with oxo, or optionally further substituted with one or two substituents independently selected from hydroxy, fluoro, and C₁-C₆ alkyl;

X is CH, N, or N^+-O^- :

Y is CR¹¹, N, or N⁺-O⁻:

Q is CR¹², N, or N⁺-O⁻;

R⁴ is hydrogen, C₁-C₆ alkyl optionally substituted up to three times with fluoro, or phenyl;

5 R⁵ is hydrogen, C₁-C₆ alkyl optionally substituted up to three times with fluoro, phenyl, -C(O)(C₁-C₆ alkyl optionally substituted up to three times with fluoro), or -SO₂(C₁-C₆ alkyl optionally substituted up to three times with fluoro);

R⁶ and R⁷ are independently selected from the group consisting of methyl, ethyl, and propyl;

R⁸ is hydrogen or C₁-C₆ alkyl;

10 R⁹ is C₃-C₅ cycloalkyl, sec-butyl, or -CH₂R¹³;

R¹⁰ is -CF₂R¹⁴, -OR¹⁵, -CH₂C(O)CH₃, -S(O)₁₋₂R¹⁶, -NR¹⁷SO₂R¹⁸, (C₁-C₃ alkoxy)-carbonyl, 1,3-dioxolan-2-yl, 1,3-dioxan-2-yl, 1,1-dioxo-2,3,4,5-tetrahydroisothiazol-2-yl, or tetrazol-5-yl optionally substituted with C₁-C₃ alkyl;

15 R¹¹ is hydrogen, chloro, isobutyl, CH₂R¹⁹; CF₂R²⁰, 1,1,1-trifluoro-2-hydroxyeth-2-yl, C₂-C₄ alkenyl optionally substituted with one or two fluorine atoms, OR²¹, C(O)R²², N(methyl)(methylsulfonyl), N(methyl)(acetyl), pyrrolidin-2-on-1-yl, methylsulfonyl, N,N-dimethylaminosulfonyl, phenyl optionally substituted with one or two substituents selected from the group consisting of hydroxymethyl, methoxy, fluoro, and methylsulfonyl, 1,3-dioxolan-2-yl, 1,3-dithiolan-2-yl, 1,3-oxathiolan-2-yl, 1,3-dioxan-2-yl, 1,3-dithian-2-yl, pyridinyl, thiazolyl, oxazolyl, or 1,2,4-oxadiazolyl optionally substituted with methyl;

R¹² is hydrogen or fluoro;

R¹³ is ethynyl or cyclopropyl;

R¹⁴ is hydrogen or methyl;

25 R¹⁵ is difluoromethyl or methanesulfonyl;

R¹⁶ is C₁-C₄ alkyl, C₃-C₆ cycloalkyl, phenyl, or -NR²⁵R²⁶;

R¹⁷ is hydrogen, C₁-C₃ alkyl optionally substituted with up to 3 fluorine atoms, or C₃-C₆ cycloalkyl;

R¹⁸ is C₁-C₃ alkyl or C₃-C₆ cycloalkyl;

30 R¹⁹ is fluoro, hydroxy, or C₁-C₃ alkoxy;

R²⁰ is hydrogen, phenyl, or furyl;

R²¹ is C₁-C₃ alkyl optionally substituted with one or two fluorine atoms;

R²² is C₁-C₃ alkyl, C₃-C₅ cycloalkyl, C₂-C₃ alkenyl, C₁-C₃ alkoxy, NR²³R²⁴, pyrrolidin-1-yl optionally substituted with methyl or one or two fluorine atoms, piperidin-1-yl, phenyl, pyridinyl, or furyl;

5 R²³ is hydrogen or methyl;

R²⁴ is methyl, ethyl, or propyl;

R²⁵ is hydrogen or methyl;

R²⁶ is methyl; or

10 R²⁵ and R²⁶ taken together with the nitrogen atom to which they are attached form a pyrrolidine or piperidine ring;

R²⁸ is hydrogen or a nitrogen protecting group;

R²⁹ is hydrogen or C₁-C₆ alkyl;

R³⁰ is hydrogen or C₁-C₆ alkyl;

15 R²⁹ and R³⁰ taken together with the nitrogen to which they are attached form a C₃-C₆ cycloalkyl ring;

R³¹ is hydrogen, C₁-C₆ alkyl, C₃-C₆ cycloalkyl, or phenyl optionally monosubstituted with C₁-C₆ alkyl;

R³² is hydrogen, R³³, or -(CH₂)₀₋₂-OR³³;

R³³ is C₁-C₁₀ alkyl optionally substituted with 1-6 fluorine atoms, C₂-C₆ alkenyl, C₂-C₆ alkynyl, or -(CH₂)₀₋₃-R³⁴;

20 R³⁴ is C₃-C₇ cycloalkyl or phenyl each optionally substituted with one or two substitutents independently selected from the group consisting of halo, C₁-C₆ alkyl, C₁-C₆ alkoxy, hydroxy, trifluoromethyl, and trifluoromethoxy, thiienyl optionally substituted with halo, benzothienyl optionally substituted with halo, thiazolyl optionally substituted with C₁-C₄ alkyl, or adamantyl;

25 R³⁵ is -(CH₂)₀₋₆-R³⁴, -C(O)-(CH₂)₀₋₆-R³⁴, -C(O)-(C₁-C₁₀ alkyl), -C(O)-(C₁-C₄ alkoxy optionally substituted with phenyl), C₁-C₁₀ alkyl optionally substituted with 1-6 fluorine atoms, C₂-C₁₀ alkenyl, or C₂-C₁₀ alkynyl;

R³⁶ and R³⁷ are both hydrogen or, taken together with the carbon atom to which they are attached form a carbonyl group;

30 R³⁸ is hydrogen or an oxygen protecting group;

R³⁹ and R⁴⁰ are independently selected from methyl, ethyl, or propyl; or an acid addition salt thereof provided that no more than one of X, Y, and Q may be N or N⁺-O⁻.